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EXAMINER

RIDER, JUSTIN W

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,930

Applicant(s)

JESSEE ET AL.

Examiner

Justin W. Rider

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/04, 03/05, 02/07, 03/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Application filed 19 March 2004. Claims 1-35 are pending.

Information Disclosure Statement

2. The information disclosure statement filed February 2007 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. A copy of the listed reference **EP 0 539 965** has not been provided. Also, **Naitou et al. (USPN 5,789,057)** will not be considered due to a lack of relevance to the instant application. Accordingly, this reference has not been considered and a line has been drawn through the reference on the PTO-1449. All other references listed on the IDS have been considered.

Specification

3. The abstract of the disclosure is objected to because it is too lengthy. Applicant is reminded that the abstract should be no longer than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 7, 10, 12-13, 16, 23 and 30 are objected to because of the following informalities: Claims 7, 10, 13 and 23 are missing periods (.). Claim 12 ends with two periods (..), also in claim 12, there is no antecedent basis for 'the anti-seg bit'. Regarding claims 16 and 30, the

Art Unit: 2626

term 'anti-segment identifier' is not specifically disclosed in the specification, however, for examination purposes, the examiner relates this phrase to 'Anti-segs' as described on p. 19-20 of the Specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 33-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no mention in the description regarding any character manipulation using 'no more than two characters' or 'no more than two words'.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 17-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In the Specification on pages 11-12, applicant disclose:

'Computer 110 typically includes a variety of computer readable media.

Computer readable media can be any available media that can be accessed by computer 110 and includes both volatile and nonvolatile media, removable and non-removable media. By way of example, and not limitation, computer readable media may comprise computer storage media and communication media.

Computer storage media includes both volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information such as computer readable instructions, data structures, program modules or other data. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical disk storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by computer 110. Communication media typically embodies computer readable instructions, data structures, program modules or other data in a modulated data signal such as a carrier wave or other transport mechanism and includes any information delivery media. ' [emphasis supplied]

Electromagnetic signals or *carrier waves*, e.g., computer data signals embodied in carrier waves, are mere manipulations of abstract ideas, and are not patentable. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. Moreover, it does not appear that a claim reciting a signal encoded with

functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

"The term machine includes every mechanical device or combination of mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." *Corning v. Burden*, 56 U.S. (15 How.) 252, 267 (1854). A modern definition of machine would no doubt include electronic devices that perform functions. Indeed, devices such as flip-flops and computers are referred to in computer science as sequential machines. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine.

Signals are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed signals do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer that permit the computer program's functionality to be realized. When functional descriptive material is recorded on some *physical* computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

Either deletion of the non-statutory language from the specification or a claimed limitation keeping the scope of the invention within the realm of a physical embodiment (e.g. floppy disk, CDROM, CD-RW, magnetic hard drive) would, in effect, render a tangible medium storing machine-readable software statutory. Therefore, it is advisable that if such a limitation was to be included that explicitly stores or encodes said software onto a *physical* medium, such a claim would essentially be viewed as statutory.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5, 8-19 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Bass et al. (USPN 4,701,851)** referred to as **Bass** hereinafter.

Claim 1: **Bass** discloses a method for identifying and verifying spelling of components within compound words, comprising:

- i. receiving the compound word (Fig. 2, (10); col. 2, lines 55-56, '*in parsing compound words in which the input word is matched...*');
- ii. searching a lexicon for the compound word (col. 2, lines 56-58, '*input word is matched against dictionary words to determine...*'); and

Art Unit: 2626

iii. identifying the component words for the compound word based on entries contained in the lexicon (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*).

Claim 2: Bass discloses a method as per claim 1 above, further comprising:

i. matching a first portion of the compound word with a first entry in the lexicon (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*); and

ii. matching a second portion of the compound word with a second entry in the lexicon (col. 2, lines 63-65).

Claim 3: Bass discloses a method as per claim 2 above, further comprising matching additional portions of the compound word (col. 2, lines 63-65) until reaching a final character of the compound word (col. 3, lines 3-7, *'In practice, for compound words the combination of the longest substring and the remainder of characters beyond the longest substring constitutes two words in the great majority of cases.'*).

Claim 4: Bass discloses a method as per claim 3 above, further comprising generating a first hypothesis of the component words of the compound word, wherein the first hypothesis is a combination of the matched portions of the compound word (col. 4, lines 26-44).

Claim 5: Bass discloses a method as per claim 4 above, further comprising generating additional hypotheses of the component words of the compound word (col. 4, lines 6-26; col. 5, lines 29-36).

Claim 8: Bass discloses a method as per claim 5 above, wherein:

Art Unit: 2626

i. matching the first portion comprises matching characters in the compound word starting from a first character of the compound word (col. 5, lines 30-32, e.g. 'over' and 'overt'); and

ii. wherein matching the second portion comprises matching characters in the compound word starting from a first character that follows a last character of the first portion (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claim 9: Bass discloses a method as per claim 8 above, wherein matching the first portion further comprising:

- i. searching the lexicon for an entry that matches the first portion (col. 5, lines 31-32);
- ii. if a match is found, analyzing the second portion for matches with entries in the lexicon (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime');
- iii. if a match is found for the second portion, generating hypotheses in a list of hypothesis, wherein the hypothesis is a combination of the first portion and the second portion (col. 6, lines 6-22).

Claim 10: Bass discloses a method as per claim 9 above, wherein if additional matches are found for the first and second portions in the lexicon, adding these matches as alternative hypotheses to the list of hypotheses (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claim 11: Bass discloses a method as per claim 9 above, further comprising:

- i. adding the hypothesis to the list of hypotheses regardless of whether the entry includes the segment indication (col. 6, lines 6-22); and

ii. excluding a resulting trace as invalid at a final evaluation of hypotheses (col. 5, line 59 - col. 6, line 22 discloses wherein when it is determined that 'ime' is an invalid word, then the word 'overt' is omitted as a hypothesized alternative.).

Claim 12: **Bass** discloses a method as per claim 11 above, wherein if the second portion includes a portion that is a non-final portion, further comprising the steps of:

- i. checking if the non-final portion includes the segment indication;
- ii. adding the hypothesis to the list of hypotheses; and
- iii. excluding the resulting trace as invalid at the final evaluation of hypotheses, if the anti-seg bit is present in the final segment of the second portion.

Bass discloses that, 'for compounds consisting of more than two constituent words, the entire process may be applied recursively to each remainder;' (col. 6, lines 20-22) and so therefore, the above limitations, which are similar to that of claims 9 and 11 are possible for additional segments.

Claim 13: **Bass** discloses a method as per claim 9 above, further comprising:

- i. returning to the first portion (col. 5, lines 64-68);
- ii. adding a character following the last character in the first portion to the first portion; repeating the steps of searching, generating, and analyzing (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 15 - col. 6, line 5, e.g. 'time' and 'ime');
- iii. if additional matches are found for the first and second portions in the lexicon, adding these matches as alternative hypotheses to the list of hypotheses (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claim 14: **Bass** discloses a method as per claim 9 above, further comprising:

Art Unit: 2626

i. prior to adding the hypothesis to the list of hypotheses, checking if the matching entry in the lexicon for the first portion includes a segment indication (col. 5, lines 8-20, 'end of dict'); and

ii. adding the hypothesis to the list of hypotheses only if the entry includes the segment indication (col. 5, lines 8-20).

Claim 15: **Bass** discloses a method as per claim 14 above, wherein if the second portion includes a portion, which is a non-final portion, checking if the non-final portion includes the segment indication; and adding the hypothesis to the list of hypotheses only if the entries for all non-final segments include the segment indication.

Bass discloses that, 'for compounds consisting of more than two constituent words, the entire process may be applied recursively to each remainder;' (col. 6, lines 20-22) and so therefore, the above limitations, which are similar to that of claims 9 and 11 are possible for additional segments.

Claim 16: **Bass** discloses a method as per claim 9 above, further comprising:

i. prior to adding the hypothesis to the list of hypotheses, checking if the matching entry in the lexicon for the second portion or a last portion of the second portion includes an anti-segment indication; and

ii. adding the string to the hypothesis only if the entry does not include the anti-segment indication.

Claim 17: **Bass** discloses a computer-readable medium for identifying and verifying spelling of components within compound words, comprising:

Art Unit: 2626

i. receiving the compound word (Fig. 2, (10); col. 2, lines 55-56, *'in parsing compound words in which the input word is matched...'*);

ii. searching a lexicon for the compound word (col. 2, lines 56-58, *'input word is matched against dictionary words to determine...'*); and

iii. identifying the component words for the compound word based on entries contained in the lexicon (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*).

iv. matching a second portion of the compound word with a second entry in the lexicon (col. 2, lines 63-65).

Claim 18: **Bass** discloses a method as per claim 17 above, further comprising matching additional portions of the compound word (col. 2, lines 63-65) until reaching a final character of the compound word (col. 3, lines 3-7, *'In practice, for compound words the combination of the longest substring and the remainder of characters beyond the longest substring constitutes two words in the great majority of cases.'*).

Claim 19: **Bass** discloses a method as per claim 18 above, further comprising:

i. generating a first hypothesis of the component words of the compound word, wherein the first hypothesis is a combination of the matched portions of the compound word (col. 4, lines 26-44); and

ii. generating additional hypotheses of the component words of the compound word (col. 4, lines 6-26; col. 5, lines 29-36).

Claim 21: **Bass** discloses a method as per claim 17 above, wherein:

i. matching the first portion comprises matching characters in the compound word starting from a first character of the compound word (col. 5, lines 30-32, e.g. 'over' and 'overt'); and

ii. wherein matching the second portion comprises matching characters in the compound word starting from a first character that follows a last character of the first portion (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claims 22-25: Claims 22-25 are similar in scope and content to that of claims 9-12 above and so therefore are rejected under the same rationale.

Claim 26: **Bass** discloses a computer-readable medium for identifying and verifying spelling of components within compound words, comprising:

i. searching a lexicon for the compound word (col. 2, lines 56-58, '*input word is matched against dictionary words to determine...* '); and

ii. identifying the component words for the compound word based on entries contained in the lexicon (col. 2, lines 57-58, '*to determine if substrings [components] of the input word match with words in the dictionary.* ').

iii. determining if each of the component words is used correctly (Abstract, '*If the remainder is not found in the dictionary, successively shorter initial substrings are accessed to yield successively longer remainders* '); and

iv. if at least one of the identified component words is used incorrectly indicating that the compound word includes a spelling error (Abstract '*The word is considered correctly spelled if both a substring and a remainder are found in the dictionary. This technique is applied recursively so that multiple-piece compounds can also be found.* ').

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 6-7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bass** in view of **Logan et al. (US 2003/0187649 A1)** referred to as **Logan** hereinafter.

Claim 6: **Bass** discloses a method as per claim 5 above, however failing to, but **Logan** does specifically disclose ranking each identified hypothesis based on a relative likelihood [probability] of being a correct representation of a word (p. 2, paragraph [0026], *'The search results include the probability of the alternative input word or phrase and/or the probability of a proximate match. The electronic documents are re-ranked according to the augmented score.'*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Logan** in the system of **Bass** because it advantageously provides multiple forms of alternative corrections that are not governed by a limited fixed vocabulary set (paragraphs [0008]-[0009]).

Claim 7: **Bass** discloses a method as per claim 6 above, however failing to, but **Logan** does specifically disclose wherein ranking is based on data obtained through statistical analysis (p. 2, paragraph [0026], *'The search results include the probability of the alternative input word or phrase and/or the probability of a proximate match. The electronic documents are re-ranked according to the augmented score.'*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Logan** in the system of **Bass** because it advantageously provides multiple forms of alternative corrections that are not governed by a limited fixed vocabulary set (paragraphs [0008]-[0009]).

Claim 20: Claim 20 is similar in scope and content to that of claim 6 above and so therefore is rejected under the same rationale.

13. Claims 27-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bass** in view of **Schabes et al. (USPN 6,424,983)** referred to as **Schabes** hereinafter.

Claim 27: **Bass** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose generating a spelling suggestion for a compound word (Fig. 14; col. 4, lines 35-38, *'The system determines alternative words for the input word, the alternative words including at least one compound word which is comprised of two or more separate words.'*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 28: **Bass** discloses a method as per claim 26 above, wherein determining if each component word is used correctly comprises:

i. if the component word is not the last component word in the compound (e.g. 'over, 'overt'), checking if the component word has a segment identifier (For the word 'overtime', **Bass** omits components such as 'ov' and 'ove' due to a lack of segmentation.);

ii. if the component word does not have the segment identifier applying spelling transition rules to the component word (col. 2, lines 63-66, *'The remainder of the input word, beginning with the next character beyond the last character of the longest matching substring, is then compared with the dictionary.'*); and

iii. rechecking if the new component word is in the lexicon with the segment identifier (col. 2, line 66 - col. 3, line 2, *'If it is not in the dictionary, the system recalls the next-longest substring and the remainder of the input word beyond this next-longest substring is tested for a match with the dictionary words.'*).

Claim 29: **Bass** discloses a method as per claim 28 above, however failing to, but **Schabes** does specifically disclose wherein if applying speller transition rules results in too many unwanted lexical matches, further comprising the possibility of searching the entries in the lexicon for the component word to identify variations that include the segment identifier generating new compound words that include the identified variations of the component word and presenting those new compound words as the spelling suggestion to the user (col. 9, lines 2-10, *'Spelling suggestion module 52 also identifies portions (e.g., characters) of the misspelled word which sound substantially similar to portions of correctly-spelled alternative words in order to obtain additional correctly-spelled alternatives words. Once all alternative words have been determined, spelling suggestion module 52 ranks these words in a list.'*).

Art Unit: 2626

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 31: **Bass** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose wherein applying speller transition rules in the compound word includes adding additional characters to the component word that are not present in the compound word (col. 8, line 65 - col. 9, line 2, *'For now, suffice it to say that spelling suggestion module 52 determines this list of alternative words by inserting, deleting, replacing, and/or transposing characters in the misspelled word until correctly-spelled alternative words are obtained.'* [emphasis supplied]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 32: **Bass** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose wherein applying speller transition rules in the compound word includes changing characters comprising the component word (col. 8, line 65 - col. 9, line 2, *'For now, suffice it to say that spelling suggestion module 52 determines this list of alternative*

Art Unit: 2626

words by inserting, deleting, replacing, and/or transposing characters in the misspelled word until correctly-spelled alternative words are obtained. ' [emphasis supplied]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Allowable Subject Matter

14. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Bass discloses a method as per claim 26 above, wherein determining if each component word is used correctly comprises if the component word is the last component word in the compound, checking if the component word has an anti-segment identifier (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime'); however, failing to specifically disclose, alone or in combination with other prior art references (**Schabes**, etc...), if the component word has the anti-segment identifier searching the entry in the lexicon for the component word to identify variations that do not include the anti-segment identifier; and if a variation of the component word does not include the anti-segment identifier, suggesting that variation of the component word as the spelling suggestion for the compound word.

Art Unit: 2626

Claims 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Bass, in view of **Schabes** discloses a method including the addition, removal, and/or changing of characters within compound words when advised to perform spelling transitions. However, the prior art fails to recite wherein presenting spelling suggestions presents the spelling suggestions only when applying speller transition rules adds, removes, or changes no more than two characters to the word as well as only providing spelling suggestions if and only if no more than two component words in the compound word required correction. Such limitations might be implied or assumed in prior art references, however the specific disclosure of the above limitations is not present.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Cantolini et al. (USPN 6,233,553)** discloses statistically based n-best word lists and compound word composition; **Carus et al. (USPN 6,035,268)** discloses word breaking; and **Levin (USPN 4,969,097)** discloses the identification of compound words and the use of spell checking applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin W. Rider whose telephone number is (571) 270-1068. The examiner can normally be reached on Monday - Friday 7:30AM - 5:00PM.

Art Unit: 2626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.W.R.
30 May 2007



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600